CHAPTER 1

Money Matters—In a Good Policy Environment

Many of the measures that promote long-term growth also help reduce poverty.

MANY DEVELOPING COUNTRIES HAVE RECEIVED large amounts of foreign aid over long periods. But has aid reduced poverty and infant mortality or increased per capita income and private investment? Would more effective aid raise incomes and significantly lower poverty in the future? And can aid's effect on poverty be improved by reallocating it from some countries to others?

All aid is ultimately aimed at promoting growth and reducing poverty, whatever the immediate objectives. In an ideal world, $1 million of aid to one country would have the same marginal effect on growth and poverty reduction as channeling the same amount to another country. In the real world, this does not happen. Some countries benefit more than others. Why? Aid effectiveness largely depends on the institutions and policies of recipient countries. Where economic management is sound, aid leads to higher private investment, more rapid growth, lower infant mortality, and a faster decline in poverty. Where economic management is poor, aid has little effect on development.

The next section of this chapter briefly reviews the divergent growth experiences of developing countries. Growth helps reduce poverty and improve social indicators, which is why the relationship between aid and growth is important. Then some stylized facts about growth, institutions, and policies are examined, and the question asked: why should aid affect growth? After that, we look at the relationship between aid and growth, aid and poverty reduction, and aid and private investment. Then another question: how has aid—both bilateral and multilateral—been allocated? Finally, recommendations are made on how aid can be made more effective.

Different Countries, Different Fortunes

In 1966 Ethiopia, India, and Thailand were all poor countries. In each society a majority of people were living on less than $1 a day (in 1985 prices). Compared with many other developing countries, India did well, doubling real per capita income between 1966 and 1990, and reducing poverty to 53 percent of the population. But over the same period Thailand did very well, tripling per capita income and cutting poverty to just 2 percent. This difference is what Robert Lucas means by the "staggering consequences for human welfare" of different rates of growth and development. The contrast between Thailand and Ethiopia is even starker. In 1966 Thailand had about four times Ethiopia's per capita income. By 1990 Ethiopians had seen no income growth, and Thailand was more than 10 times wealthier.

Growth matters not for its own sake, but because it raises living standards. Of every 1,000 babies born in 1967 in Thailand, 84 did not survive the first year of life. By 1994 that figure had been cut by nearly two-thirds. India and Ethiopia also made progress, but not as much. In India infant mortality fell by a half over this period. In Ethiopia it fell by only 27 percent. Other social indicators tell a similar story. By 1990 Thailand had achieved universal primary education for girls, while the figure for India was 91 percent and for Ethiopia, 19 percent.

Growth does not eliminate poverty and deprivation, but per capita incomes and social indicators tend to improve (or deteriorate) together: life expectancy, school enrollment, infant mortality, and child malnutrition are all closely related to per capita income. Although there have been great improvements in living standards globally, the huge differences across countries show the importance of development. Take infant mortality: in nearly every developing country it fell between 1967 and 1994. The extent of the decline, however, varied widely (figure 1.1). Economically stagnant countries such as Zaire (now Democratic Republic of Congo), Ethiopia, Niger, and Zambia saw only modest falls, while such faster-growing countries as Botswana, Chile, Lesotho, Mauritius, and Tunisia saw improvements of 70 percent or more.

Rising incomes of the poor expand their capacity to improve their health, education, and living standards. Moreover, many of the measures that promote long-term growth—basic education or an open trade regime, for example—also help reduce poverty. But economic growth does not solve all ills: environmental degradation, crime and violence,

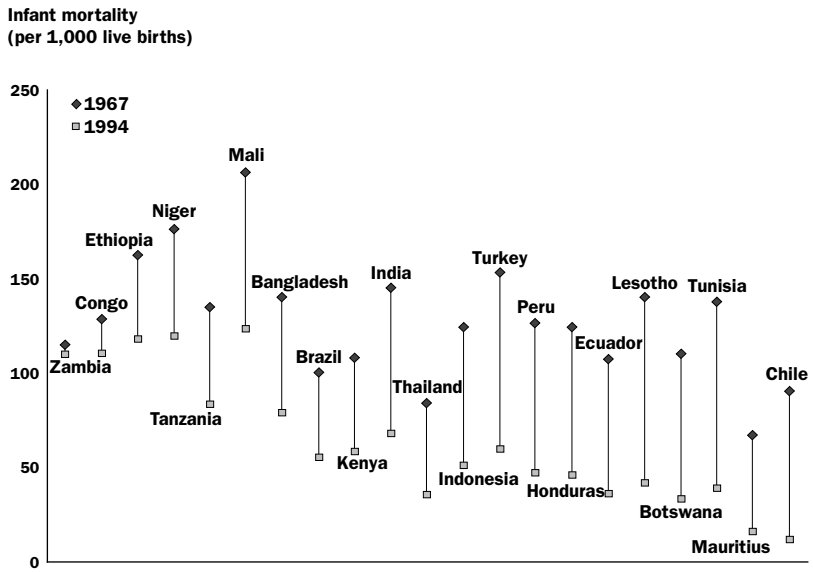
"Rates of growth of real per capita GNP are diverse, even over sustained periods. For 1960–80 we observe, for example: India, 1.4 percent per year; Egypt, 3.4 percent; South Korea, 7.0 percent . . . . Between the 60s and 70s, Indonesia's growth increased from 3.9 to 7.5.

"I do not see how one can look at figures like these without seeing them as representing possibilities. Is there some action a government of India could take that would lead the Indian economy to grow like Indonesia's? If so, what, exactly? The consequences for human welfare involved in questions like these are simply staggering: Once one starts to think about them, it is hard to think about anything else."

Robert E. Lucas, Jr.
"On the Mechanics of Economic Development"
p. 4–5

From the same starting points in 1967, infant mortality fell to 33 per thousand in Botswana in 1994 while remaining virtually unchanged at 110 in Zambia.

Figure 1.1 Infant Mortality in Selected Countries, 1967 and 1994



Source: World Development Indicators 1998.

sex discrimination, social exclusion, and the like may or may not improve with income. When people improve their status from low to middle income, new challenges emerge for society. Consider, for example, the choking haze—from fires set to clear plantations—that enveloped Southeast Asia in the summer of 1997. Or the many developing country cities that have severe problems with traffic congestion and air pollution.

Still for low-income countries, generating self-sustaining growth is a crucial first step in development. If Ethiopia's total output were divided evenly among households, everyone would be poor. Growth (an increase in per capita income) is clearly required to solve poverty and its problems: malnutrition, poor health, and lack of education and basic social services.

Overall, developing countries have made tremendous progress: more babies are surviving, more food is on the table, more children are in school, and there are fewer deaths from easily preventable diseases. There has been more global improvement in life expectancy in the past 40 years than in the previous 4,000 (World Bank 1993). The revolu-

tionary expansion of education can be seen across generations: 62 percent of Chinese in their sixties received no schooling as children, compared with just 5 percent of young adults. In Indonesia 80 percent of 60-year-olds had no schooling, compared with just 15 percent of young adults.

But in all dimensions, progress has been uneven geographically. The greatest improvement has been in fast-growing economies. Since World War II, developing countries have fallen into three categories: fast growers, slow and stalled growers, and nongrowers and reversals (Pritchett 1998). A small but significant group—Botswana, Indonesia, the Republic of Korea, and Thailand—has grown much faster than industrial countries (table 1.1). The gap between these countries and the United States (the leader in income) has narrowed impressively.

Countries can, and do, move in (and out) of the group of fast growers. Many were sure that Korea was a basket case before growth took off in the early 1960s. Indonesia in 1966 was plagued by slow growth, high inflation, and social unrest. Before the boom in 1974, Mauritius's GDP per capita was lower than in 1960. Other countries have joined the high-growth set more recently: China since the late 1970s, and Chile since 1984. Countries also fall out of the fast-grower set. Brazil's growth was 4.2 percent from 1965 to 1980 but then –0.2 percent from 1980 to 1992. And Indonesia's growth will certainly slow as a result of its current crisis.

Slow growers, with growth rates similar to those of industrial countries, include Bangladesh, India, Malawi, and Pakistan. They have not been falling behind, but they are not catching up either. In 1990 per capita income in the United States was 18 times India's, about the same as in 1966. But since per capita income roughly doubled for each country, the absolute gap is now much wider. Slow-growing countries have seen some improvement in poverty and social indicators, but not nearly as much as the fast growers.

For a significant number of people in the world, there has been no per capita growth in recent decades, or even (especially recently) substantial decline. Many of these people live in Africa: for instance, Côte d'Ivoire, Ethiopia, and Zambia. Non-Africans include Haitians, Nicaraguans, and Iranians. In relative terms, these countries are falling further behind the rest of the world. In 1966 per capita income in the United States was 20 times Zaire's; now it is 50 times.

Table 1.1 Real Per Capita Income Relative to the United States

	Percentage of U.S. income	
	1966	*1990*
Fast growers		
Botswana	4.7	12.5
Indonesia	5.0	10.9
Korea, Rep. of	9.6	37.0
Thailand	10.1	19.8
Slow growers		
Bangladesh	8.8	7.7
India	5.4	7.0
Malawi	3.6	2.9
Pakistan	7.3	7.7
No growers		
Côte d'Ivoire	11.6	6.7
Ethiopia	2.4	1.8
Haiti	7.3	4.5
Iran	29.0	18.8
Nicaragua	18.7	7.2
Zaire	5.1	2.2
Zambia	8.5	3.8

Source: Summers and Heston 1991.

Why the Divergence?

There is plenty of evidence that good macroeconomic management provides a fertile environment for growth.

HOW TO EXPLAIN THESE WIDELY DIFFERING GROWTH PERFORmances? It was once thought that the key factor holding back poor countries was a lack of savings and foreign exchange for investment. Part of the initial rationale for foreign aid was to help countries overcome a "savings gap" to finance necessary investment and a "foreign exchange gap" so that imported machinery could be the cornerstone of that investment. Development agencies worked with a "two gap" model that made imports and investment in physical capital the driving force of growth. The role of aid in promoting growth was clear, since aid can help fill both gaps.

The slow stagnation and sudden collapse of the Soviet system of central planning, which was the intellectual father of "gap thinking" and development planning, made it clear that investment alone cannot guarantee growth. In the 1990s the focus of theoretical and empirical work on growth has gone deeper. Emphasis has shifted from investment to incentives. That is, from capital to the underlying institutions and policies that promote growth by encouraging efficient investment, by supporting human capital development, and by facilitating technological advance.

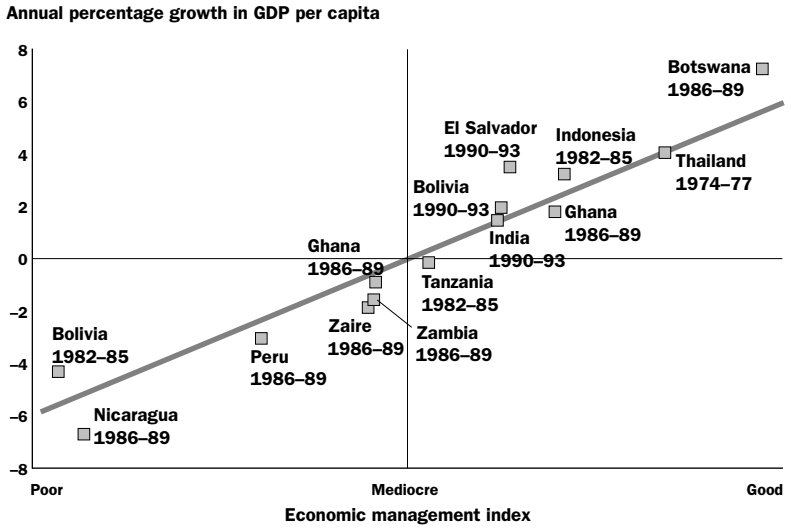
What are the conclusions of this new growth literature?

A stable macroeconomic climate is crucial. High inflation is bad for investment and growth (Fischer 1993). Similarly, large fiscal deficits hold back growth (Easterly and Rebelo 1993). An outward orientation and a reasonable environment for international engagement are essential: most trade liberalizations accelerate growth (Sachs and Warner 1995).[1] Fiscal, monetary, and trade policies show whether a country is well managed at the macroeconomic level, and there is plenty of evidence that good macroeconomic management provides a fertile environment for growth.

Good institutions and economic management are also needed at the microeconomic level. The strength of private property rights and the rule of law and the quality of the civil service affect long-term growth (Knack and Keefer 1995). Similarly, corruption in the public bureaucracy is bad for growth (Mauro 1995).

For their studies of aid and growth, Burnside and Dollar (1997, 1998) compiled a dataset covering 56 aid-receiving developing countries and averaging growth, aid, and other variables over four-year periods (starting with 1970–73 and ending with 1990–93). They created an economic management index based on the Sachs-Warner measure of openness, the

Figure 1.2 Economic Management and Growth in Selected Developing Countries



Source: Burnside and Dollar 1998.

Countries with better policies can grow faster, and reform can get them there—as in Ghana and Bolivia.

budget surplus, the inflation rate, and a measure of institutional quality. Obviously there is more to economic management, but these serve as a useful, and measurable, proxy.[2] The relationship between per capita growth and the economic management index reconfirms that sound management—at both the macroeconomic level and institutional levels—is important for growth (figure 1.2).

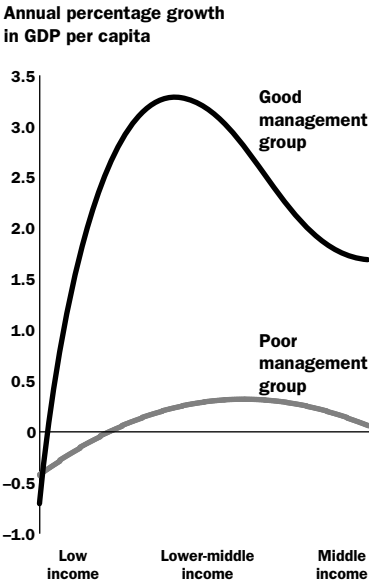
This finding suggests that poor countries have been held back not by a financing gap, but by an "institutions gap" and a "policy gap." If they can overcome them, they can begin to grow successfully. Botswana and Thailand are examples of good management—Tanzania and Zambia of poor. The difference in management between, say, Thailand and Tanzania may have been worth about 4 percentage points of growth. (Note that while Indonesia had solid macroeconomic policy, it scored badly on the measure of institutional quality.)

Countries can reposition themselves over time. Bolivia and Ghana had poor management in the early 1980s, but became good-management countries in the 1990s. The macroeconomic policies included in this index can be changed quickly if society and government want to reform. Other institutional aspects of good management, such as the rule of law, take longer to improve (North 1990).

Growth rates are also much more volatile in developing countries than in industrial countries (Easterly and others 1993). Developing countries may grow at 5 percent per capita in one four-year period, and then at –3 percent in the next. Empirical studies of growth can explain about half of the variation in growth rates among developing countries.

Poor countries have the potential for rapid growth.

Figure 1.3 Growth Rate and Income Level



Source: Burnside and Dollar 1998.

In Countries with Good Management . . .

THERE ARE POTENTIAL ADVANTAGES TO BACKWARDNESS, BUT these can be realized only with good policies (Sachs and Warner 1995). The Burnside-Dollar sample can be divided into good and poor management groups, to show the relationship between income at the beginning of a period and subsequent growth (figure 1.3). Among the good-management group, middle-income countries grow faster than high-income ones. The superstars—the East Asian tigers (before the 1997 crisis) or Chile—are found in the good-management, middle-income group, which grew much faster than high-income countries. By and large, good-management middle-income countries attract a lot of foreign direct investment, learn technologies from more advanced economies, and have investment with a high return to capital. They are catching up with the industrialized world, but as they move closer growth tends to slow, as there are fewer opportunities to learn, and the return to capital diminishes. In contrast, with poor management there is no advantage to backwardness: such countries grow slowly at all income levels. Countries that cut themselves off from globalization (through restrictive trade practices and unstable macroeconomic policies) are the biggest losers.

When low-income countries, such as Mali, put good policies in place, they perform better, but they still do not match the results for the middle-income countries. There are several reasons for this. These countries may have other characteristics that hurt growth—being landlocked, for instance. But it is also possible that their ability to save and invest is hampered by poverty itself, even when good policies are in place. If international capital markets were perfect, private money would perhaps flow to seriously reforming countries. But imperfections mean that private investors cannot accurately assess the situation and may hold back, undermining what would otherwise be a successful reform program.

This suggests a role for foreign aid in sparking developing country growth. Financial aid to poor countries that have good policies should have a high return. It can help them accelerate to rapid growth. On the flip side, there is no reason to suppose that pouring aid into poor-management countries will accelerate growth.

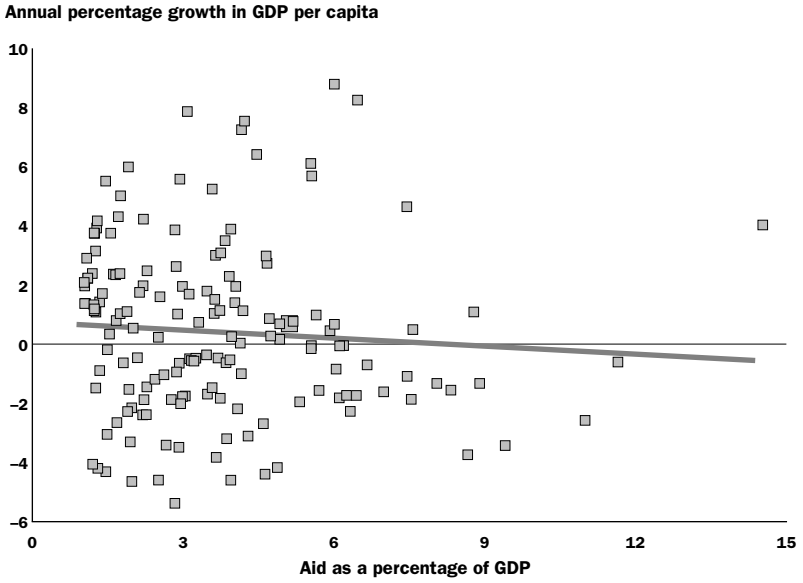
Development assistance can also encourage policy reforms (how it can do so is the subject of the next chapter). Serious reform can add 2–3 percentage points to growth. This would make an enormous difference in developing countries that have had little or no growth in per capita income over the past 25 years.

. . . Aid Spurs Growth

The simple relationship between aid and per capita growth in developing countries is weak, if it exists at all (figure 1.4).[3] Some countries get a great deal of assistance and grow slowly (Zambia, for instance) while others also get a lot and grow quickly (Botswana, Ghana).

From this simple starting point, there are two problems in analyzing the effect of aid on growth. First, other factors that affect growth must be

Figure 1.4 Aid and Growth in Selected Developing Countries, 1970–93



Source: Burnside and Dollar 1998.

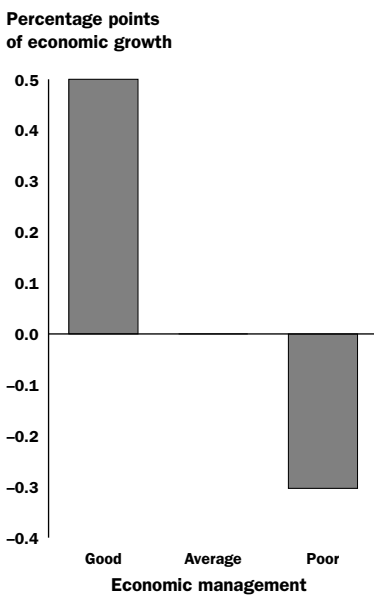
Some countries received a lot of assistance, and incomes fell—some countries received little aid, and incomes rose.

considered. Second, in some cases aid may be deliberately given to countries that are growing poorly. Consider a country hit by a typhoon that destroys the rice crop—thus reducing growth. This calamity may induce a temporary increase in aid. Thus, while the simple relationship might appear to be a negative association between aid and growth, it would be a mistake to interpret this as evidence that aid reduces growth.

A recent study addressed both of these problems and still found no relationship between aid and growth (Boone 1994). Even when a range of institutional, political, and policy variables are added to the equation the result is still the same—no relationship.

With good management an additional 1 percent of GDP in aid increases growth by 0.5 percentage point.

Figure 1.5 Marginal Impact on Growth of a Percent of GDP in Aid



Source: Appendix 1.

What changes the picture completely, however, is separating good-management from poor-management countries. The proposition that aid has no effect where incentives are weak was tested by Burnside and Dollar (1997). For countries with poor management it is true: whatever the amount of aid, growth was minuscule, or even negative. That some countries have received large amounts of aid for decades yet shown no growth has given aid a bad reputation.

Taking the good-management group and dividing them into high-aid and low-aid groups produces striking results. The good-management, low-aid group grew at 2.2 percent per capita, but the good-management, high-aid group grew almost twice as fast—at 3.7 percent per capita. Including other variables (institutional, political, and policy) shows that aid has a large, positive effect on growth in good-management countries (appendix 1). Removing middle-income countries, which receive little aid, from the sample makes the effect of aid even stronger. With good management, an additional 1 percent of GDP in aid increases growth by 0.5 percentage points—a rate of return of roughly 40 percent, if depreciation is 10 percent or so a year (figure 1.5). Countries with sound management that have received a lot of aid and done well include Bolivia, El Salvador, Ghana, Honduras, and Mali in the 1990s.

There are diminishing returns to aid so that—even with good management—the benefit will decline as aid is increased. However, given the amount of assistance that well-managed countries actually receive, there would still be a strong positive return to increasing aid to these countries. In Ghana in the 1990–93 period, for example, a doubling of aid would have been necessary to reach the point at which the marginal return to further finance would have been zero.

Moreover, if a country is receiving even the average amount of aid (about 2 percent of real purchasing power parity GDP), a 1 point increase

in its management index leads to an increase in growth of 1.3 percentage points. With twice that amount of aid the effect of good management is even stronger—growth is 1.9 percentage points higher.

Other researchers have reached similar conclusions. In a recent study comparing aid effectiveness in Bolivia, Costa Rica, and Nicaragua, Cecilia Lopez, Colombia's Minister of Planning, found that aid did not have much effect on growth in Nicaragua because of the country's highly distorted policies—a large fiscal deficit and high inflation. Aid was largely effective in Bolivia, which successfully completed a reform program in the 1980s. Lopez's conclusion from the three case studies:

Policies have a critical influence on the effectiveness of aid, for the same reasons that they affect economic growth.

- Foreign aid in itself is neutral with respect to development, for its positive or negative effects depend on government policies. Effects on economic development will tend to be positive when aid is used to build up capital or to finance public investment that contributes to the profitability of private capital, or for human capital development.
- Fiscal policy should generate government's current savings, so that both domestic and foreign resources finance public investment. If this does not happen, foreign resources may end up financing the government's current expenses and not investment projects, as happened in Nicaragua.
- The relationship between aid's positive effects and good domestic policies always holds, even during adjustment (Lopez 1997).

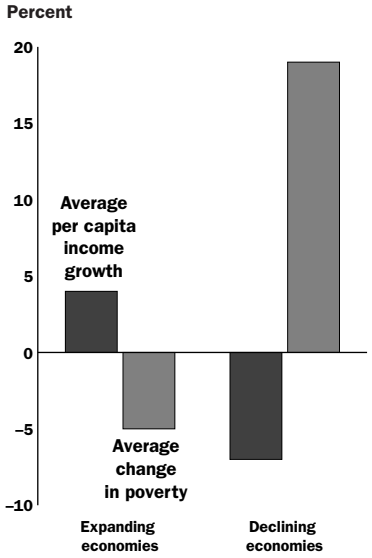
A study of seven African countries by researchers from donor and recipient countries (under the auspices of the Overseas Development Council) pointed to good economic policies as a key precondition for successful assistance:

> "Clearly, the large influx of aid has not fostered rapid economic growth in most African countries and has been only partly successful in poverty alleviation. How can one reconcile this lack of success with the field-level evidence just cited and reach a clear verdict on aid's economic impact? Unfortunately, a number of factors prevent the establishment of a clear link between aid and the overall performance of the economy. First, government economic policies themselves can prevent aid from having the impact it otherwise would have. Policies have a critical influence on the effectiveness of aid, for the same reasons that they affect economic growth;

economic policies that engender balance of payments difficulties, high budget deficits, or high rates of inflation are likely to foster a climate of economic uncertainty, which dampens the private sector's response to the public investment represented by aid. A classic example of such a phenomenon is an aid-funded agricultural extension project that does not achieve its objectives of output or productivity growth, because macroeconomic policies have resulted in an overvalued exchange rate, which makes the farmer's output noncompetitive. Similarly, policies that create extensive market distortions are likely to undermine the quality of scarce resource use, resulting in socially suboptimal outcomes. Taking up the example of the agricultural extension project, farmer response is muted because the government's agricultural policies provide farmers with disincentives to adopt yield-enhancing new technologies. These are not fortuitous examples: by the mid-1980s, most experts were convinced that donor and government attempts to expand and modernize agriculture in many African states had been largely undone by macro and sectoral policies that were exacerbating the impact of the decline in world prices for agricultural commodities. They credited the prevailing policy environment with the superior performance of the agricultural sector in Kenya, for example, and the poor performance in Tanzania and Zambia" (van de Walle and Johnston 1996, p. 36–37).

In declining economies an average drop of 7 percent in per capita income led to an increase in poverty of 19 percent.

Figure 1.6 Economic Growth and Poverty



Source: Ravallion and Chen 1997.

. . . Aid Reduces Poverty

The main aim of aid is to reduce poverty. Poverty reduction in developing countries is closely related to per capita income growth. Development economists used to worry that the benefits of growth would be undone by increases in income inequality as poor countries developed. Recent evidence has shown conclusively, however, that this is not so.

One study examined trends in the distribution of income for 45 countries for which high-quality household income or expenditure data are available over time (Li, Squire, and Zou 1998). In 29 countries there has been no trend in either direction. The remaining 16 countries are divided: 8 have shown rising inequality, 8 declining. If income distribution does not change much over time, the gains in per capita income will affect different segments of society to about the same degree. Thus, in countries with rapid growth, incomes of the poorest will rise rapidly and the inci-

dence of poverty will decline. But in countries with no per capita growth and a stable income distribution, there will be no poverty reduction.

Another study examined recent per capita growth and poverty reduction in 67 countries for which household data were available. It found that every country with increasing per capita household income saw poverty decline, and every country with declining per capita income saw poverty increase. In the expanding economies, per capita income grew 4 percent, and poverty declined 5 percent. In declining economies an average drop of 7 percent in per capita income led to an increase in poverty of 19 percent (figure 1.6).

Poverty data are not available for all countries and time periods in the Burnside and Dollar study, so direct examination of the effect of aid is impossible. But according to Bruno, Ravallion, and Squire (1998), on average a 1 percent increase in per capita income in developing countries reduces poverty by 2 percent. Put another way, in countries with sound management an extra 1 percent of real GDP in aid results in a 0.5 percentage point increase in growth and hence a 1 percent decline in poverty. In countries with poor management the expected effect of aid on poverty reduction is far less.

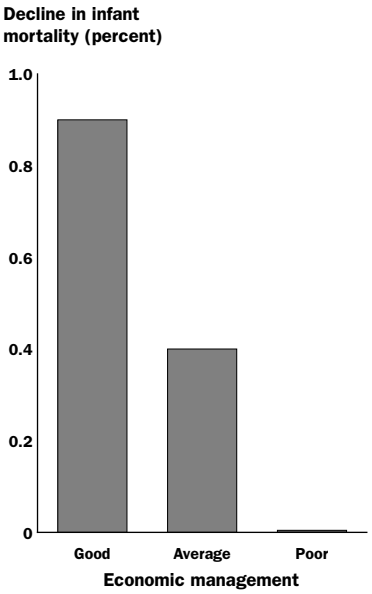
Aid can affect well-being in many ways. Consider changes in infant mortality, an important social indicator for which data are widely available. Burnside and Dollar found that aid helps reduce infant mortality if a country has good management—an extra 1 percent of GDP in aid leads to a decline in infant mortality of 0.9 percent (figure 1.7). In contrast, if a country has poor management, there is no marginal impact from another 1 percent of GDP in aid.

. . . Aid "Crowds in" Private Investment

The impact of aid on growth in good-management countries is high. This may be because once good management is in place, there are high-productivity public investments to be financed by aid. If an economy is growing rapidly, the return on investment in road rehabilitation, for example, is high. If the economy is stagnant, the return is lower or nonexistent. Similarly, economic growth makes it easier to get children into school and have a high return from this investment in human capital. In a sluggish economy the incentives to send children to school are weak. Thus, with good management in place, aid helps government make more of these high-return expenditures. Evidence at the microeconomic level supports this finding. Public investments financed by the World Bank,

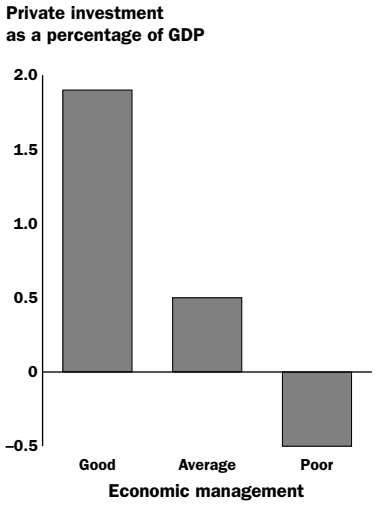
With good management an extra 1 percent of GDP in aid leads to a decline in infant mortality of 0.9 percent.

Figure 1.7 Decline in Infant Mortality from a Percent of GDP in Aid



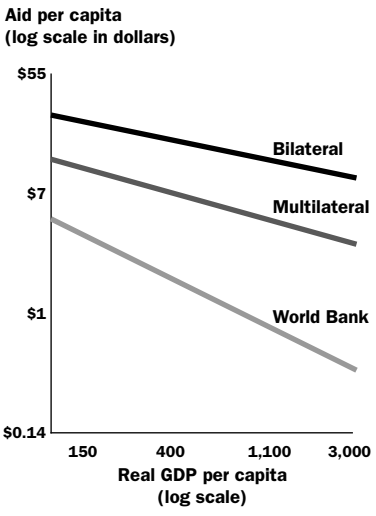
Source: Burnside and Dollar 1998.

Figure 1.8 Marginal Impact on Private Investment of a Percent of GDP



Source: Dollar and Easterly 1998.

Figure 1.9 Bilateral, Multilateral, and World Bank Aid Per Capita and Income Level



Source: Calculated from Burnside-Dollar dataset.

for instance, have more success in a good institutional and policy environment: 86 percent, compared with only 48 percent in a weak institutional and policy environment (see overview figure 5).

There is another possible explanation for the relationship between aid and growth—that when a poor country puts good policies in place, domestic and foreign private investors are uncertain about the sustainability of the reform. If there is fear of reversal, investors will wait. And even with good management, low-income countries are hamstrung by other impediments, including weak infrastructure. Foreign aid to reforming governments may improve the environment for private investment—both by creating confidence in the reform program and helping to ease infrastructure bottlenecks.

In a poor-management country foreign aid may crowd out private investment: it may encourage the public sector to make commercial investments that would otherwise be undertaken by private investors. In a good-management country the effects of foreign aid would likely be magnified by crowding in private investment.

There is evidence to support these notions (Dollar and Easterly 1998). One percent of GDP in assistance increases private investment an extra 1.9 percent of GDP in good-management countries (figure 1.8). Thus the combination of good management and foreign aid is welcomed by the private sector, and this helps to explain the strong effect aid has on growth in such an environment. In a poor-management country, however, 1 percent of GDP in aid is estimated to reduce private investment by 0.5 percent of GDP, which may explain why the net effect of such aid is small.

These findings for the effect of aid on growth and private investment shed some light on the problems of the Heavily Indebted Poor Countries and how they can be helped (box 1.1).

Aid Has Not Favored Countries with Good Management

TARGETING ASSISTANCE TO POOR COUNTRIES WITH SOUND institutions and policies will make the most of scarce aid resources to encourage investment, spur growth, and reduce poverty. But between 1970 and 1993 aid allocations—by bilateral and multilateral donors—were dominated by politics—both the international politics of the Cold War and the internal politics of aid agencies.

Foreign aid is targeted to poor countries—but imperfectly. Bilateral aid per capita received by developing countries has a weak, negative relationship with their per capita income (figure 1.9). Generally, a doubling of per capita income leads to a 33 percent reduction in aid. But the behavior of bilateral donors varies widely (Ehrenpreis 1997). Half of all Swedish aid has gone to the poorest 12 percent of countries (weighted by population); of all bilateral aid, only 20 percent went to these countries. Another study also found that Canadian, Dutch, and Nordic assistance is sharply targeted to poor countries (Alesina and Dollar 1998). The relationship between aid per capita and income is stronger for multilateral aid than for bilateral and stronger still for the World Bank's International Development Association (IDA) facility, which is part of multilateral aid. For IDA, a doubling of per capita income has been associated with a 90 percent reduction in aid per capita.

Another important factor in aid allocation is population. Countries that have small populations get more assistance per capita or more rela-

Box 1.1 Aid and Heavily Indebted Poor Countries

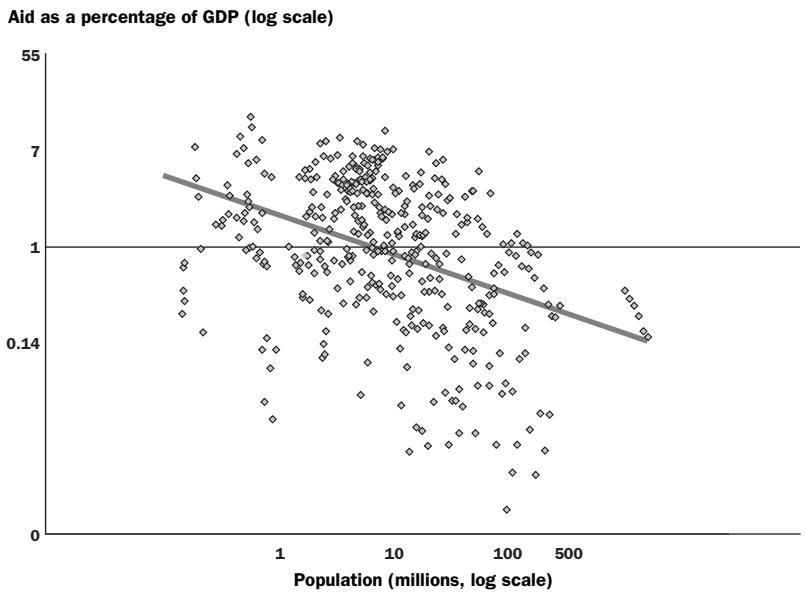
HEAVILY INDEBTED POOR COUNTRIES ARE LOW-income countries that have debt they cannot service. The problem arises not largely from foreign aid (which is mostly grants), but because these countries borrowed too much from private capital markets or from official sources at near-commercial interest rates. How did they get into such trouble? And how can they be helped?

These countries had poorer management in the 1970s and 1980s than other low- income countries, and showed virtually no per capita growth in 1970–93. Even so, they were able to run up large amounts of debt. These borrowings were not put to good use and certainly did not generate a high enough return to repay the loans.

In the 1990s highly indebted poor countries have been receiving extraordinary amounts of aid to service these debts—about twice as much as they should have, based on per capita income, population, policies, and so on. Despite the assistance to service these debts, the large debt overhang creates an uncertainty for the whole economy. What happens if donors lose interest in these extraordinary aid allocations to service debt?

The World Bank, the IMF, and other donors have started an initiative to forgive large amounts of this debt, which should give these countries more resources to provide important public services. An additional benefit of debt relief will be to improve the climate for private investment. Removing the unpayable debt, once and for all, will relieve uncertainty. Benefits from debt relief will be greater if countries have undone the poor management practices that contributed to their troubles in the first place. Debt relief is a form of aid and will have a greater impact in a good-management country. Removing the debt overhang for those with poor management is not likely to produce significant benefits. For these reasons, the debt reduction initiative for heavily indebted countries requires a track record of policy reform. The first countries to benefit from debt reduction in the mid-1990s—Uganda, Bolivia—successfully reformed policy.

Figure 1.10 Aid and Population



Source: Calculated from Burnside-Dollar dataset.

tive to GDP (figure 1.10). This makes sense for some assistance. For instance, it costs about the same to provide technical assistance to the central bank of India as to the central bank of Lao PDR. But if aid is financing public services, such as education or road construction, there perhaps should not be such discrimination against large countries. More than half the world's poor live in India and China: in 1990–93 they received $2 and $1 per capita in aid. Yet small countries often receive $50 per capita or more. This discrimination against large countries is one reason the relationship between aid allocation and income is not strong.

A second factor that undermines this relationship is that aid allocation often depends on the political or strategic interests of donors—for example, U.S. aid in the Middle East or European aid to former colonies. Burnside and Dollar (1997) found that political factors help explain the allocation of bilateral aid, but that multilateral aid is not strongly influenced. These factors are not important for only a handful of bilateral donors—Canada, Denmark, Finland, Netherlands, Norway, and Sweden (Alesina and Dollar 1998).

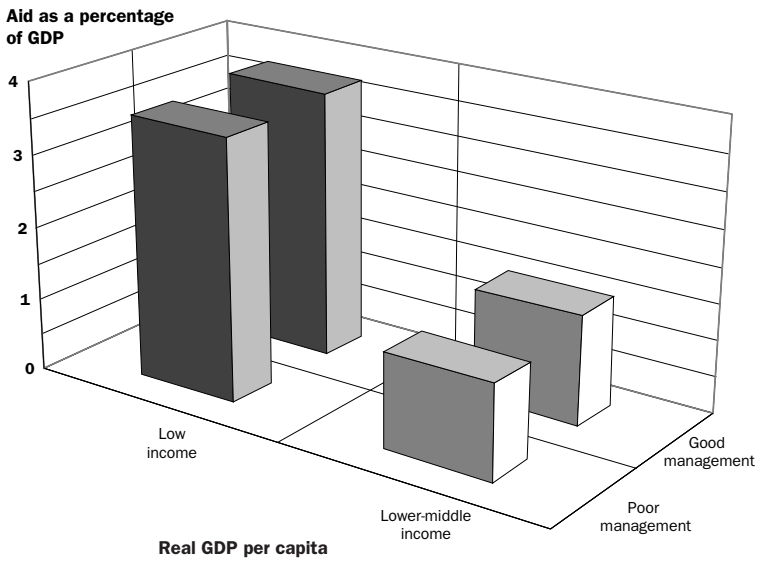
The dual objectives—pursuing strategic goals and rewarding good policies—work against each other. This can be seen by looking at the cor-

relation between bilateral aid and management (figure 1.11). So, how have bilateral donors treated two countries with the same income and population but different management? Good and bad management regimes have received roughly the same average assistance. Being a former colony of a major donor is more valuable in attracting bilateral assistance than having good management (Alesina and Dollar 1998).

The allocation of multilateral aid has depended on income, population, and good management. Political and strategic considerations were not significant. Thus, for multilateral aid, lower-middle income countries with good management received 30 percent more than the typical poor-management country with the same income and population (figure 1.12). For very low-income countries the difference between good management and poor management has been minor.

Since most official development assistance is bilateral, the allocation of all aid together (multilateral and bilateral) shows little relationship with the quality of country management. Cold War aid driven by strategic considerations may have accomplished its political goals, but aid that went to countries with poor management did little to reduce poverty.

Figure 1.11 Allocation of Bilateral Aid, 1970–93



Source: Calculated from the Burnside-Dollar dataset.

Be Focused

At the moment plenty of countries combine mass poverty with good policies and institutions.

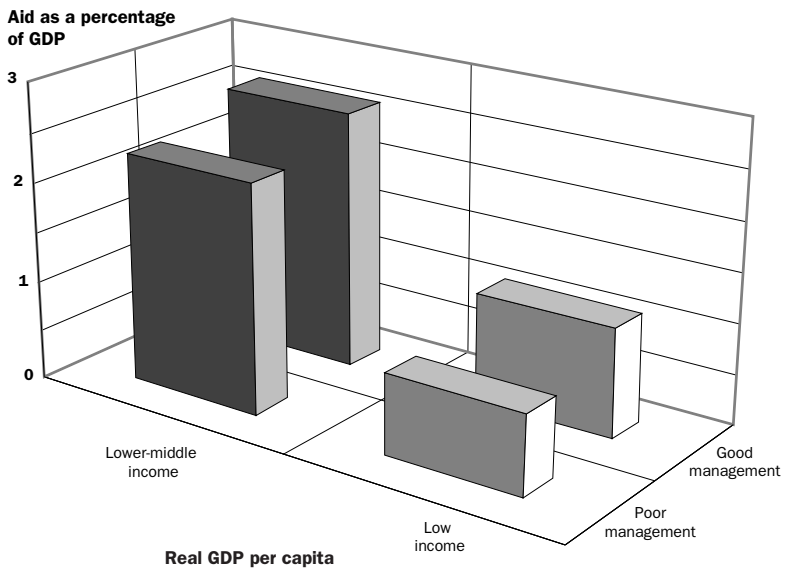
CLEARLY, DEVELOPMENT ASSISTANCE NEEDS TO BE MORE CONCENtrated on where it can be most effective in reducing poverty. It needs to take more account of the environment in which it is placed. Finance is most effective in reducing poverty in those countries that have both mass poverty and a good policy and institutional environment. Conversely, it is less effective in countries that already have relatively little poverty, or have poor policies and weak institutions.

But is there much scope for a more focused approach? Perhaps mass poverty is so strongly linked with poor policies and weak institutions that we just don't find the combination of mass poverty and good policies in which aid is highly effective? Not so. At the moment plenty of countries combine mass poverty with good policies and institutions. Why? Because of the wave of policy reform and institution building that has swept through poor countries during the 1990s.

Figure 1.13 classifies 113 developing countries based on their incidence of poverty and the quality of their policies in 1996.[4]

What creates a great opportunity for foreign aid is the upper-right-hand quadrant. Thirty-two countries have poverty rates above 50 per-

Figure 1.12 A ocation of Mu ti atera Aid, 1970–93



Source: Calculated from Burnside-Dollar data set.

cent, and also have above average policies. In such conditions aid is highly effective in reducing poverty. Some of the countries in this quadrant are among the poorest in the world: for example, Ethiopia, Uganda, Mali, and India. This is the *High Impact* quadrant for aid.

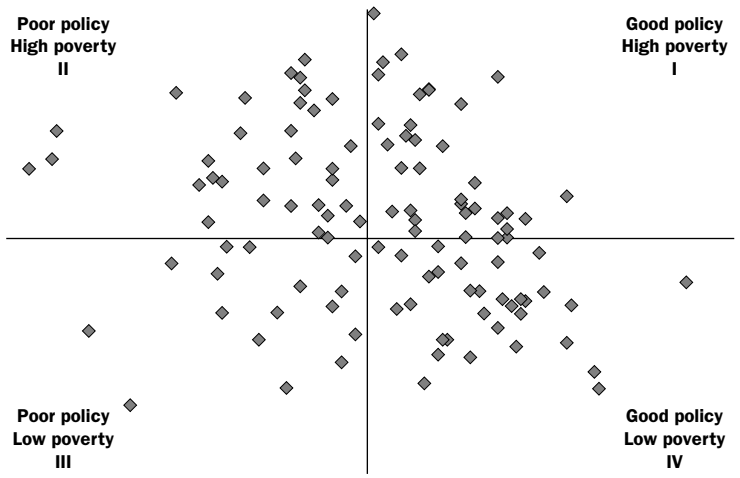
Conversely, in the bottom-left-hand quadrant aid is radically less effective. Sixteen countries already have a low incidence of poverty, as well as below average policies. There are fewer poor people to help, and aid does less for them because it is handicapped by the poor policies.

In the remaining two quadrants aid is less effective than in the *High Impact* quadrant.

In the upper-left-hand quadrant there are 32 countries with poverty rates above 50 percent. There are millions of poor people in these economies in need of help, but unfortunately the policy environments are not good enough for aid to have much effect. The priority for the world community in these countries is to help in the domestic political and social process of policy change: that is, in contributing knowledge rather than big finance. Of course, some financial flows provide opportunities for dialogue and knowledge transfers. But aid to these economies has to be justified more for its indirect contribution to policy change than for its direct effect on poverty reduction.

Why? Because of the wave of policy reform and institution building that has swept through poor countries during the 1990s.

Figure 1.13 Poverty and Policy, 113 Developing Countries, 1996



Source: Collier and Dollar 1998.

An across-the-board $10 billion increase in aid would lift 7 million people out of poverty, while a targeted increase could lift 25 million out of poverty.

In the lower-right-hand quadrant there are 31 countries that have above-average policies. Aid works in these environments, but there is less work for it to do, since there is already a low incidence of poverty.

So, there is certainly scope for a focused approach to aid: financial assistance to *High Impact* countries is far more effective than in countries in other quadrants. But is there scope for aid to be *more focused* than it is at present? Surely, donors are already taking into account poverty and policies in determining where to allocate finance—aren't they?

Actually, not very much. To see this, suppose that the world community raised an extra $10 billion and allocated it proportionately to existing aid allocations. So allocated, this extra aid could raise 7 million people out of poverty. Now suppose instead that the $10 billion were allocated to the *High Impact* quadrant. The extra impact would be dramatic: 25 million people would be raised out of poverty (Collier and Dollar 1998).

Being more focused can thus spectacularly increase the effectiveness of aid in reducing poverty. Nearly four times as many people could be lifted out of poverty for a given amount of aid. And of course, if aid became much more effective, there would be more of it. Rapid poverty reduction is the major global challenge: demonstrated effectiveness can be expected to produce greater support for aid.

Notes

1. All three of these studies consider whether good policies bring about growth or growth spurs good policies—and conclude that policy reform leads to more growth.

2. Collier and Dollar 1998 show that the finding that aid has more impact in a good management environment holds in the 1990s using a much broader measure of institutions and policies, including issues such as corruption, governance, equity, and safety nets. For research purposes, this broader measure has the disadvantage that it is not available back through time.

3. For the growth analysis, aid is measured relative to GDP at purchasing power parity (Summers and Heston 1991). In low-income countries, this measure of GDP is often three times higher than GDP at domestic prices because prices of nontraded goods tend to be low in poor countries. In the developing world the average aid receipt relative to PPP GDP is about 2 percent. The same amount would be 6–7 percent of GDP in domestic prices.

4. The measure of policy used to construct this figure is the Country Policy and Institutional Assessment of the World Bank. It has more components than the index in the Burnside-Dollar study, including such areas as social sector policies and safety nets. It has the advantage of covering a large number of countries and being up-to-date. But it is not available as a consistent measure going back in time.